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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,196	02/09/2001	Robert Miller	ROC9-1999-0110-US2	7925
46296	7590	04/05/2005	EXAMINER	
MARTIN & ASSOCIATES, LLC IBM INTELLECTUAL PROPERTY LAW DEPARTMENT DEPARTMENT 917, BUILDING 006-1 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			ALAM, UZMA	
			ART UNIT	PAPER NUMBER
			2157	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/780,196

Applicant(s)

MILLER, ROBERT

Examiner

Uzma Alam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to the amendment filed on November 29, 2004. Claims 1-22 are pending. Claims 1-22 represent a method of time-out free waiting for an ordered message in a clustered computing environment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al. US Patent No. 6,247,59. Johnson discloses the invention as claimed including a system which sends messages, the messages containing information allowing the receiver to make sure that messages are received in the proper order.

As per claims 1, 6, and 11 Johnson discloses an apparatus, networked computer system, computer implemented method and program product comprising

- at least one processor (Figure 2);
- a memory coupled to the at least one processor (Figure 2);

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a cluster engine residing in the memory and executed by the at least one processor, the cluster engine providing a mechanism for communicating ordered messages to and from a plurality of nodes in a computer cluster, wherein the apparatus comprises one node in the computer cluster (the node header consists of a sequence number; Figure 3c; column 2, lines 11-22);

a protocol residing in the memory that specifies at least one data message and at least one acknowledge (ACK) round that provides a time benchmark for determining whether or not a message has been received without using any timer (a time is determined by the time value on the header or the time of life marker; column 2, lines 26-43; column 5, lines 42-67; column 6, line 1-7); and

a job residing in the memory and executed by the at least one processor, the job processing the protocol, wherein the job functions according to receiver logic that uses the at least one ACK round to determine without using any timer whether the at least one data message has been received (the messages are sent based a date of birth; column 2, lines 26-43; column 6, lines 1-34).

As per claim 16, Johnson discloses a program product comprising:

(A) a protocol that specifies at least one data message and at least one acknowledge (ACK) round that provides a time benchmark for determining whether or not a message has been received without using any timer (a time is determined by the time value on the header or the time of life marker; column 2, lines 26-43; column 5, lines 42-67; column 6, line 1-7);

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(B) a job that processes the protocol, wherein the job functions according to receiver logic that uses the at least one ACK round to determine without using any timer whether the at least one data message has been received (the messages are sent based a date of birth; column 2, lines 26-43; column 6, lines 1-34); and

(C) computer-readable signal bearing media bearing the protocol and the job (Figure 3c; column 2, lines 11-22).

As per claims 2, 7, 14 and 19 Johnson discloses the apparatus, networked computer system, computer implemented method and program product of claims 1, 6, 11 and 16 wherein the protocol comprises a plurality of phases that are each followed by an acknowledge (ACK) round (column 2, lines 26-60; column 4, lines 56-67; column 5, lines 1-41; column 6, lines 1-45).

As per claims 3, 8, 13 and 20 Johnson discloses the apparatus, networked computer system, computer implemented method and program product of claims 2, 7, 12, 19 wherein each phase of the protocol is defined so that no node can both send a data message and receive a data message during any phase of the protocol (column 2, lines 18-34).

As per claims 4, 9, 14, and 21 Johnson discloses the apparatus, networked computer system, computer implemented method and program product of claims 1, 6, 11 and 16 wherein the receiver logic comprises post-ACK logic that determines whether the at least one data message has been received after the job processes a selected one of the at least one ACK rounds (column 6, lines 33-46).

As per claims 5, 10, 15 and 22 Johnson discloses the an apparatus, networked computer system, computer implemented method and program product of claims 1, 6, 11 and 16 wherein the receiver logic comprises pre-ACK logic that determines whether the at least one data message has been received before the job processes a selected one of the at least one ACK rounds (column 6, lines 61-67; column 7, line 1-9).

As per claim 17, Johnson discloses the program product of claim 16 wherein the signal bearing media comprises recordable media (column 4, lines 13-17; Figure 2).

As per claim 18, Johnson discloses the program product of claim 16 wherein the signal bearing media comprises transmission media (column 4, lines 19-34; Figure 2).

Response to Arguments

Applicant's arguments filed November 24, 2004 have been fully considered but they are not persuasive.

Applicant argues that the reference teaches the use of a timer and therefore does not anticipate the limitations of claims 1. in response to the argument, Examiner points out that the reference, Johnson et al. US Patent No. 6,247,059 does not use the timer in determining timing benchmarks for the ACK messages. The system does have a timer, but it is not used in the point-to-point messaging between the sender and the receiver and is not used to determine whether a

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message been received or not, as stated in the claim. The messages are sent until an ACK message is received from the receiving node. See column 2, lines 39-60 and column 7, lines 24-67, column 8, lines 1-20 for further detail.

Applicant argues that receiver logic was not considered when using the reference. In response to the arguments, column 2, lines 44-60 in the reference is pointed to. This shows that the receiving node is expecting certain messages and performs logic - checking sequence numbers, sending ACKs or NACKs – and processes the messages based on the logic. This shows that the reference does teach receiver logic. Also, the previously cited parts of the reference, column 7, lines 24-67, column 8, lines 1-20, also teach that the receiving node is waiting for certain messages and performs sequence checks to determine whether the message has been received or not. The DOB marker and sequence numbers are used by the receiver to verify that all the intended messages were received and are used as a time benchmark by the receiving node.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uzma Alam whose telephone number is (571) 272-3995. The examiner can normally be reached on Monday-Tuesday 11:30am-8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Uzma Alam
Ua



SALEH NAJJAR
PRIMARY EXAMINER